3.10 TRAFFIC, ACCESS, AND CIRCULATION

Implementation of the project would require the use of the local circulation system for construction activities and operations. This traffic analysis considers the construction impacts to the street system due to the construction-related activities. Operational impacts are not considered in this analysis as there would be no resulting project-related traffic once restoration activities are completed. This section is based on the traffic analysis presented in Construction Impact Analysis, San Elijo Restoration Project (LLG 2014), included as Appendix J. Technical details of the traffic analysis and methodology are included in that report.

3.10.1 AFFECTED ENVIRONMENT

Effective evaluation of the traffic impacts associated with the project requires an understanding of the existing transportation system within the project study area. This section describes the existing circulation system and traffic conditions of the project study area. Focused discussions on the specific conditions at San Elijo Lagoon and materials disposal/reuse sites are provided under separate headings.

San Elijo Lagoon Study Area

Study Area

The proposed restoration activities within the San Elijo Lagoon study area would occur in-and-around San Elijo Lagoon, generally east and west of I-5, south of Manchester Avenue, and north of Lomas Santa Fe Drive. I-5, Coast Highway 101, Chesterfield Drive, San Elijo Avenue, Manchester Avenue, Lomas Santa Fe Drive, and North Rios Avenue were included in the analysis. The following eight associated intersections were also included in the project study area analysis.

- Coast Highway 101/Chesterfield Drive
- Chesterfield Drive/San Elijo Avenue
- I-5 Southbound (SB) Ramps/Manchester Avenue
- I-5 Northbound (NB) Ramps/Manchester Avenue
- Lomas Santa Fe Drive/Coast Highway 101
- Lomas Santa Fe Drive/N. Rios Avenue
- I-5 SB Ramps/Lomas Santa Fe Drive
- I-5 NB Ramps/ Lomas Santa Fe Drive

Existing Circulation System

The following is a description of the existing street network in the study area. Peak hours discussed in this section refer to the peak commuter hours for adjacent street traffic, which occur weekdays between 7 to 9 a.m. and 4 to 6 p.m.

Interstate 5

I-5 is classified as a Freeway and built as an eight-lane divided roadway in the vicinity of the project area. The nearest interchanges to the project area are at Lomas Santa Fe Drive, Manchester Avenue, and Birmingham Drive. On-ramps at these interchanges are metered with the exception of the northbound on-ramp at the Birmingham Drive Interchange.

Coast Highway 101

Coast Highway 101 is classified as a Scenic Highway within the City of Solana Beach Circulation Element and as a Four-Lane Major road within the City of Encinitas Circulation Plan in the vicinity of the study area. From Lomas Santa Fe Drive north to just north of West Cliff Street, Coast Highway 101 is currently built as a three-lane roadway (two travel lanes northbound and one southbound) with a raised center median. This portion of the roadway is part of the recently implemented Coast Highway 101 Westside Improvement Project, which extends from Dahlia Drive to West Cliff Street. This project has facilitated the provision of pedestrian amenities, diagonal parking, a landscaped median, and bicycle "sharrows" among other improvements. A Class II bike lane is provided on the east side of the roadway. The posted speed limit has been reduced to 35 mph in this area.

North of West Cliff Street to Ocean Street, Coast Highway 101 is built as a four-lane roadway divided by a landscaped raised median. North of Ocean Street to Chesterfield Drive, Coast Highway 101 is built as a four-lane undivided roadway with posted speed limits between 45 mph and 50 mph. Class II bike lanes and bus stops are provided along both sides of the roadway. Curbside parking is intermittently allowed on the west side of the roadway. There are paved shoulders but no sidewalks are provided along this stretch of Coast Highway 101. Traffic is controlled by signals at some driveways, providing access to beach parking or businesses located along the highway; otherwise, spacing between signalized intersections is large. The Coast Highway 101 bridge is also a four-lane facility.

Chesterfield Drive

Chesterfield Drive is an unclassified local road, currently built as a two-lane undivided roadway extending east from Coast Highway 101 near the coast. Curbside parking is generally available but very restricted on some narrower blocks. The posted speed limit is 25 mph and sidewalks are generally available on at least one side of the roadway, west of Montgomery Avenue. There is an at-grade crossing of Chesterfield Drive by the San Diego Northern Railway (SDNR), managed by NCTD. During peak hours, three or fewer crossings occur, requiring interruption of standard signal timing for the intersections adjacent the crossing on Chesterfield Drive.

San Elijo Avenue

San Elijo Avenue is classified as a Local Collector road and is currently built as a two-lane undivided roadway with a speed limit of 25 mph. In the vicinity of the project area, curbside parking is provided near Chesterfield Drive but is otherwise generally prohibited. Sidewalks are provided on the east side of the roadway, north of Dublin Drive.

Manchester Avenue

Manchester Avenue from El Camino Real west to I-5 is classified as a Prime Arterial road in the City of Encinitas Circulation Plan. West of I-5, Manchester Avenue is classified as a Local Collector road in the City of Encinitas Circulation Plan. The segment of Manchester Avenue between El Camino Real and I-5 is currently constructed as a four-lane undivided roadway. The posted speed limit is 50 mph and a Class II bikeway is provided on either side of the roadway. Parking along the roadway is prohibited. West of I-5 to San Elijo Avenue, Manchester Avenue is currently constructed as a two-lane undivided roadway with a posted speed limit of 40 mph. Curbside parking is generally not provided and there is an intermittent sidewalk along the north side of the roadway. Beyond San Elijo Avenue, Manchester Avenue becomes a local residential road with a 25 mph speed limit and curbside parking. Manchester Avenue has a 7-ton truck weight limit beginning just west of the I-5 southbound ramps.

Lomas Santa Fe Drive

Lomas Santa Fe Drive is classified as a Major Arterial road on the City of Solana Beach Circulation Element. It extends from Coast Highway 101 near the coast eastward to the Solana Beach city limits. It provides four undivided travel lanes with an intermittent two-way left-turn lane from Coast Highway 101 to where it forms a fully signalized diamond interchange at I-5. The speed limit is posted at 35 mph and Class II bike lanes are provided along both sides of the roadway within the study area.

North Rios Avenue

North Rios Avenue is classified as a Local Road in the City of Solana Beach Circulation Plan and runs from the edge of San Elijo Lagoon in the north to Lomas Santa Fe Drive in the south. North Rios Avenue is currently built as a two-lane undivided roadway generally serving residences, the Solana Beach School District, and some commercial uses near Lomas Santa Fe Drive. The posted speed limit is 25 mph. Curbside parking is provided intermittently along either side of the roadway. Sidewalks are generally not provided except for north of Patty Hill Drive and immediately north of Lomas Santa Fe Drive.

Existing Level of Service

Level of service (LOS) is the term used to denote the different operating conditions that occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis with designations ranging from A through F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions.

Weekday AM/PM peak hour intersection turning movement counts were conducted at eight study area intersections in October 2012 while schools were in session. No major events (e.g., San Diego County Fair or horse racing) were occurring at the Del Mar Fairgrounds at this time. Bidirectional 24-hour segment counts were also conducted in October at 10 street segments in the project study area. Average daily traffic (ADT) volumes and LOS are shown in Table 3.10-1. Existing intersection operations are shown in Table 3.10-2.

As shown in Table 3.10-1, the study area street segments currently operate at LOS D or better with the following exception:

- Lomas Santa Fe Drive, Solana Hills Drive to I-5 SB Ramps – LOS E

As shown in Table 3.10-2, study area intersections currently operate at LOS D or better.

Table 3.10-1
Existing Street Segment Traffic Volumes and LOS

Street Segment	Jurisdiction	ADT	LOS
Coast Highway 101			
North of Chesterfield Drive	Encinitas	16,550	A
South of Chesterfield Drive	Encinitas	20,130	A
North of Lomas Santa Fe Drive	Solana Beach	17,560	C
Chesterfield Drive			
East of Coast Highway 101	Encinitas	17,950	A
San Elijo Avenue			
South of Chesterfield Drive	Encinitas	670	A
Manchester Avenue			
West of I-5	Encinitas	7,100	A
East of I-5	Encinitas	28,240	D
North Rios Avenue			
North of Lomas Santa Fe Drive	Solana Beach	2,080	A
Lomas Santa Fe Drive			
East of Coast Highway 101	Solana Beach	19,550	B
Hilmen Drive to Glencrest Drive/Stevens Avenue	Solana Beach	23,010	C
Solana Hills Drive to I-5 SB Ramps	Solana Beach	38,130	E

Table 3.10-2
Existing Intersection Operations

Intersection	Control Type	Peak Hour	Existing	
			Delay[1]	LOS
Chesterfield Drive/Coast Highway 101	Signal	AM	20.2	C
		PM	27.2	C
Chesterfield Drive/San Elijo Avenue	Signal	AM	23.3	C
		PM	21.7	C
Manchester Avenue/I-5 Southbound Ramps	All-Way Stop Controlled	AM	17.5	C
		PM	12.4	B
Manchester Avenue/I-5 Northbound Ramps	Signal	AM	18.5	B
		PM	23.6	C
Lomas Santa Fe Drive/Coast Highway 101	Signal	AM	28.6	C
		PM	33.4	C
Lomas Santa Fe Drive/Rios Avenue	Signal	AM	10.8	B
		PM	11.8	B
Lomas Santa Fe Drive/I-5 Southbound Ramps	Signal	AM	20.0	C
		PM	19.6	B
Lomas Santa Fe Drive/I-5 Northbound Ramps	Signal	AM	49.2	D
		PM	29.0	C

[1] Average delay expressed in seconds per vehicle

Materials Disposal Study Area

This existing conditions section for traffic at the potential materials disposal study areas addresses onshore placement site access. As described in Section 2.10.2, the majority of work necessary for materials placement on onshore sites occurs offshore and minimal land transportation is required. All offshore and nearshore disposal/reuse material placement would be accomplished via ocean barge and pipeline, and no land-based traffic would result; thus, offshore and nearshore scenarios are not further considered in this traffic analysis. Information specific to the onshore materials disposal/reuse study area discussion is from the 2012 RBSP EA/EIR (SANDAG 2011).

Regional access to disposal/reuse sites is provided via I-5. West of I-5, access is also provided via Coast Highway 101, which extends from Oceanside south to Solana Beach. North Torrey Pines Road provides direct access to the Torrey Pines site. The principal access routes from I-5 to each of the onshore disposal sites are identified in Table 3.10-3.

Table 3.10-3
Principal Access Routes

Receiver Site	Principal Access Route
Leucadia	La Costa Avenue, Leucadia Boulevard
Moonlight Beach	Encinitas Boulevard
Cardiff	Birmingham Drive
Solana Beach	Lomas Santa Fe Drive, Via de la Valle
Torrey Pines	Carmel Valley Road, Genesee Avenue

Existing traffic on beach access routes is often heavy, as most of the routes serve commercial, motel or camping, and residential uses as well as area beaches. Traffic is most congested on warm weekends, when residents from throughout San Diego County and adjacent areas use the beaches. During these peak use periods, beach parking areas often are filled to capacity.

3.10.2 CEQA THRESHOLDS OF SIGNIFICANCE

A significant impact related to traffic, access, and circulation would occur under CEQA if implementation of the proposed project would:

A. Conflict with an applicable congestion management program, including, but not limited to, LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;

B. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

C. Result in inadequate emergency access;

D. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities; or

E. Result in a long-term impact to access routes, local streets, or parking areas in the vicinity of the project area.

The CEQA thresholds of significance for traffic, access, and circulation were derived from a combination of thresholds listed in Appendix G of the CEQA Guidelines and thresholds used in the the 2012 RBSP EIR document. In addition, the cities of Encinitas and Solana Beach use the published, regional San Diego Traffic Engineers' Council (SANTEC) criteria for determining the significance of a project's traffic impacts. According to these criteria, a project is considered to have a significant impact if the new project traffic has decreased the operations of surrounding roadways by a defined threshold. The defined thresholds for roadway segments and intersections are defined in Table 3.10-4. If the project exceeds the thresholds in Table 3.10-4, then the project may be considered to have a significant project impact. These thresholds are also considered applicable to Caltrans facilities.

Table 3.10-4
Traffic Impact Significance Thresholds

Level of Service with Project [1]	Allowable Increase due to Project Impacts [2]			
	Freeways	Roadway Segments	Intersections	Ramp Metering
	V/C	V/C	Delay (seconds)	Delay (minutes)
D[3], E, & F (or ramp meter delays above 15 minutes)	0.01	0.02	2	2

[1] All LOS measurements are based on Highway Capacity Manual procedures for peak-hour conditions. However, V/C ratios for roadway segments may be estimated on an ADT/24-hour traffic volume basis (using this table or a similar LOS chart for each jurisdiction). The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

[2] If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are deemed significant. These impact changes may be measured from appropriate computer programs or expanded manual spreadsheets.

[3] The City of Encinitas accepts LOS D operations, regardless of project increase in V/C, delay, etc., whereas the City of Solana Beach considers LOS D to have the same allowable increases as LOS E/LOS F. The analysis tables define the jurisdiction of each location.

V/C = volume to capacity ratio

Delay = Average stopped delay per vehicle measured in seconds for intersections, or minutes for ramp meters

3.10.3 ENVIRONMENTAL CONSEQUENCES

This section discusses the environmental consequences, or impacts, associated with the proposed project on traffic operations and circulation patterns in the study area. Potential adverse, significant, or beneficial direct and indirect impacts are identified as appropriate.

The regulatory setting related to traffic and circulation is generally set forth through the traffic criteria adopted by local jurisdictions to define acceptable levels of operation for existing and future traffic conditions on their roadways. This information is provided above in Section 3.10.2 for the cities of Encinitas and Solana Beach. Appendix C contains applicable regulatory requirements specific to individual topic areas.

Lagoon Restoration

This section analyzes the potential impacts associated with short-term construction activity of lagoon restoration. Phase 2 of Alternative 2A was determined to have the greatest potential for trip generation due to vegetation clearing and new bridge construction and reflects the most conservative estimation for traffic. It is therefore considered the "project" for the purposes of the traffic analysis. Alternative 1B and Alternative 1A would each generate less traffic since there would be no new bridge construction associated with those alternatives (and bridge retrofit work would generate fewer trips over a shorter duration) and vegetation clearing would be similar or less than that identified for Alternative 2A. As detailed in Section 2.10.1, Phase 2 of Alternative 2A would include the majority of the material being hauled off-site during vegetation clearing, dredging of the lagoon itself (employee trips), and also bridge construction and de facto traffic rerouting (Alternative 2A). Modification of the concrete CDFW dike would also occur during this phase, but would not result in truck trips since material would be reused to create the proposed transitional area (Alternative 2A and Alternative 1B) or only minor excavation would be required to enhance flow through the dike (Alternative 1A). Proposed flooding to support construction activities would not extend to or affect public roadways or general traffic operations. The analysis below is separated into trip generation and road closure discussions to distinguish between the impacts associated with each.

Trip Generation

The following are construction characteristics of the project alternatives that would generate traffic in the project study area. Please see the Traffic Analysis Report in Appendix J for full calculation details.

Vegetation Clearing

While this activity would occur in advance of dredging for all four phases of the project, the majority of material (300,000 cy) is assumed to be removed during Phase 2, using 12-cy capacity dump trucks. The majority of these trips would be limited to staging area and access site 7, identified in Figure 2-15, which is located adjacent to the freeway and would avoid the need for trucks to travel through existing neighborhoods. Removal of the CDFW dike would not create truck trips on the public road network. The amount of time needed for Phase 2 vegetation removal is approximately 172 working days with seven dump trucks available each day to remove vegetation and the CDFW dike from the site. Assuming 172 working days to remove 300,000 cy of material using seven dump trucks each with a 12-cy capacity, the average number of one-way trips per day calculates to 21 one-way truck trips per working day.

Each truck trip would be multiplied by a factor of two to represent the inbound loading trip and the outbound haul trip (two-way trip). A Passenger Car Equivalence (PCE) Factor of 3.0 would also be applied to the trip to represent the fact that heavy vehicles have an additional effect on traffic flow as compared to passenger cars and light trucks due to their diminished handling characteristics. During hauling operations, contractors typically follow a 10-hour workday; therefore, the anticipated daily haul trips would be 126 PCE ADT with approximately 14 AM peak hour (7 inbound/7 outbound) and 14 PM peak hour (7 inbound/7 outbound) PCE trips.

Temporary Dike Construction and Removal

The construction and removal of temporary dikes would occur during all four phases of the project. Approximately 50,000 cy of material would be needed for this activity. The material is proposed to be generated from the lagoon by either excavation along the utility road and/or proposed dike footprint, or by obtaining the material from Caltrans as surplus from the I-5 North Coast Corridor Project bridge replacement. No off-site hauling of material is anticipated with this activity. Therefore, no truck trips would occur and the total number of workers expected on any given day was assumed to account for dike-related activities.

Dredging

Dredging of the lagoon would occur over all four phases of the project. The dredged material would be exported from the site via pipeline or reused within the project footprint, so no truck trips would occur and the total number of workers expected on any given day was assumed to account for dredging-related activities. Ocean-based traffic associated with materials placement and disposal, including barge trips and monobuoy location, is addressed under Land Use/Recreation and Hazardous Materials and Public Safety. These sections also discuss project

design features identified in Chapter 2 that are intended to minimize conflicts with existing marine traffic, such as coordination with USCG and issuance of a Notice to Mariners (see PDF-49 through PDF-51).

Worker Trips

The total number of workers associated with construction-related activities expected to be on-site on any given day during the 36-month construction period is up to 40 workers based on proposed phasing and type of activities. Typical work shifts during grading and dredging are expected to be 8-hours per day, which differs slightly from shift durations that typically occur during hauling operations. One shift is anticipated to occur during construction activities limited to daytime hours (e.g., access road improvements), while multiple shifts would occur during 24-hour dredging operations. Dredging operations require few personnel and shift changes generally occur at off-peak hours. Forty workers per day working 8-hour shifts represents a conservative estimate of worker trips. The total number of daily trips generated by workers would be 80 ADT. The peak hour volumes (AM and PM peaks) were estimated assuming that workers arrive on-site at 7:00 a.m., prior to the start of the AM peak period (between 7:00 and 9:00 a.m.) based on a typical construction workday. It was conservatively assumed that the total worker force would leave during the PM peak period (between 4:00 and 6:00 p.m.), although it is likely that most workers would leave the site prior to this time at the end of the work shift (closer to 3:30 p.m., based on an 8-hour workday). Therefore, no worker trips would be generated during the AM peak period and 80 worker trips would be generated during the PM peak period (0 inbound/40 outbound).

Miscellaneous Trips

It is also expected that assorted, miscellaneous trips would occur, such as visits by inspectors and engineers, deliveries of materials not discussed already, etc. Some truck trips were also accounted for in miscellaneous trips.

Employee Parking

Parking for employees would be provided, generally in public parking lots adjacent to Coast Highway 101 and Manchester Avenue (Figure 2-15). During peak beach attendance, dedicated lots would be identified for contractor parking (PDF-59). A shuttle would likely be necessary for some of the more distant lots.

Bridge Reconstruction (Alternative 2A Only)

The project would demolish and replace Coast Highway 101 with a bridge over the new mouth of the lagoon (Alternative 2A only). This reconstruction would occur during Phases 1 through 3

of the overall project. Bridge reconstruction would occur in two parts, with each part resulting in the closure of one side of the highway, although two-way traffic is proposed to be maintained at all times. Bridge reconstruction is anticipated to take 18 months total, 10 months for the first phase and 8 months for the second. The highway alignment and bridge approach would conform to Caltrans standards for sight distance and vertical clearance (PDF-32). No new vehicle types (e.g., farm equipment) are anticipated to use the bridge and no intersections would be added to the alignment. No horizontal curves would be added to the project with the exception of temporary detour lanes. Temporary detours would likely require a temporary speed limit reduction for the detour approaches and exits, but would still conform to safe highway design speeds (PDF-33). **These features would not substantially increase hazards or introduce incompatible uses along Coast Highway 101, and would not represent a significant impact (Criterion B). No substantial adverse impact would occur.**

Based on construction estimates, 240 two-way concrete delivery truck trips, 200 two-way other delivery-type truck trips, 600 two-way base and asphalt concrete delivery truck trips, and 3,000 two-way dump truck trips would be required over the course of the 18-month bridge construction period. It is expected that concrete delivery trucks would occur over 40 days throughout the entire bridge construction period, other delivery truck trips would occur regularly throughout the entire 18 months, base and asphalt concrete delivery truck trips would occur over 6 months (3 months per stage) during construction of the new roadway, and dump truck trips would occur over 2 months (1 month per stage) to excavate for the bridge and remove the existing roadway.

Since bridge construction is expected to begin during the first phase of project construction, traffic from bridge construction that would overlap with Phase 2 of the project was included in the trip generation calculations. For concrete and other/various truck trips, as well as dump truck trips, the average number of truck trips per day was calculated since these trips are expected to occur throughout the 18-month period. For base and asphalt truck trips, the number of trips expected during the 3 months of the second stage was included in Phase 2 to provide a conservative analysis.

Consistent with the vegetation removal phase, the hourly average of overall daily truck trips was utilized to determine the AM and PM peak hour trips. This average was divided in two to represent the inbound and outbound average during the hour. Calculations determined a total of 260 two-way trips per day with an average of 34 trips per hour (17 inbound/17 outbound per hour).

The bridge would remain in service throughout the demolition and replacement period, with two-way traffic flow maintained at all times (PDF-34). As one side of the current four-lane bridge is closed and rebuilt, two-way traffic would be rerouted to the other side, with lane drops and detours across the median necessary on Coast Highway 101 on either side of the bridge. There

are no plans to provide formal detour routes, since two-way traffic would continue to be maintained. However, it is expected that some through traffic on Coast Highway 101 would divert to I-5, with the final opportunity to do so via Manchester Avenue in the north or Lomas Santa Fe Drive in the south.

Operations along Coast Highway 101 south of Chesterfield Drive and on Lomas Santa Fe Drive from Solana Hills Drive to I-5 would be affected by the bridge lane closure and would experience degradation in LOS exceeding the allowable thresholds during bridge construction activities. **This degradation would be considered a temporary direct significant and substantially adverse impact (Criterion A).**

Bridge Retrofitting (Alternatives 1B and 1A Only)

Alternative 1B and Alternative 1A would not necessitate the replacement of the Coast Highway 101 bridge as proposed in Alternative 2A as there is no new inlet; however, Alternative 1B and Alternative 1A would involve retrofitting the existing bridge to address existing seismic deficiencies. Similar to Alternative 2A, the existing bridge would remain in service throughout the retrofitting activities, with two-way traffic flow maintained at all times (PDF-34), with one side of the bridge closed and traffic rerouted to the other side while work was completed. While the duration and timing of the retrofitting would be less than the complete bridge construction, the necessary lane closures are similar and thus would result in similar traffic impacts and trip redistribution as analyzed for Alternative 2A. **No changes would be made to the existing roadway configuration; therefore, Alternative 1B and Alternative 1A would not substantially increase hazards or introduce incompatible uses along Coast Highway 101, and would not represent a significant impact (Criterion B). No substantial adverse impacts would occur.**

Total Trip Generation

Project-generated ADT was calculated by taking worker and truck trips for each component of Phase 2 of the project (Alternative 2A and Alternative 1B) as described above (vegetation removal, bridge construction, worker trips, and miscellaneous trips) and combining them for a total. The total maximum ADT associated with Phase 2 would be 512. This includes 35 in and 35 out trips during the AM peak hour and 35 in and 75 out trips during the PM peak hour.

Methodology

Signalized Intersections

Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in the *2000 Highway Capacity Manual* (HCM). The delay values (seconds) were qualified with a corresponding intersection LOS.

Unsignalized Intersections

Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and LOS were determined based upon the procedures found in the 2000 HCM.

Street Segments

Street segments were analyzed based upon the comparison of ADT to either the SANTEC *Roadway Classifications, Levels of Service and Average Daily Traffic* table (Solana Beach), or the City of Encinitas' *Roadway Capacity Standards* table, as appropriate.

Alternative 2A–Proposed Project

Street Segments

Table 3.10-5 shows the pre-construction and construction peak hour roadway segment operations. As shown in the table, study area roadway segments would operate at LOS D or better with the exception of Lomas Santa Fe Drive from Solana Hills Drive to I-5, which would continue to operate at LOS E. While the service level remains at LOS E, the volume to capacity (V/C) increase does not exceed the 0.020 V/C maximum identified in the SANTEC/Institute for Transportation Engineers (ITE) guidelines. Thus, **a less than significant direct or indirect traffic impact would result along street segments during pre-construction and construction activities and impacts are not considered substantially adverse (Criterion A).**

Table 3.10-5
Street Segment Operations

Street Segment	Pre-Construction			Construction Period			
	ADT	LOS	V/C	ADT	LOS	V/C	Δ
Coast Highway 101							
North of Chesterfield Drive	16,700	A	0.474	16,700	A	0.474	0.000
South of Chesterfield Drive	20,180	A	0.573	20,310	A	0.577	0.004
North of Lomas Santa Fe Drive[1]	18,040	C	0.601	18,396	C	0.613	0.012
Chesterfield Drive							
East of Coast Highway 101	17,950	A	0.554	17,990	A	0.555	0.001
San Elijo Avenue							
South of Chesterfield Drive	670	A	0.034	710	A	0.036	0.002
Manchester Avenue							
West of I-5 Southbound Ramps	7,100	A	0.355	7,146	A	0.357	0.002
East of I-5 Northbound Ramps	28,240	D	0.872	28,264	D	0.872	0.001
Rios Avenue							
North of Lomas Santa Fe Drive[2]	2,080	A	0.260	2,086	A	0.261	0.001
Lomas Santa Fe Drive							
East of Coast Highway 101	19,950	B	0.499	20,312	B	0.508	0.009
Hilmen Drive to Stevens Avenue	23,410	C	0.585	23,772	C	0.594	0.009
Solana Hills Drive to I-5	38,530	E	0.963	38,892	E	0.972	0.009

Capacities based on City of Encinitas and Solana Beach roadway classification tables.
Δ=Change in delay due to construction traffic.
[1] Coast Highway 101 north of Lomas Santa Fe Drive is constructed with one lane in the southbound direction and two lanes in the northbound direction separated by a landscaped raised median. Therefore, a modified capacity of 30,000 ADT for a 4-Lane Major Arterial was used in the analysis.
[2] A nominal number of trips generated during the vegetation removal phase of the project would be expected to use Rios Avenue to reach a site access/staging area at the northern terminus of this residential roadway (6 ADT).

Intersections

Table 3.10-6 shows the pre-construction and construction peak hour intersection operations. As shown in the table, study area roadway intersections would operate at LOS D or better with the addition of construction traffic. **Thus, a less than significant direct or indirect traffic impact would result at intersections during pre-construction and construction activities and impacts are not considered substantially adverse (Criterion A).**

Table 3.10-6
Intersection Operations

Intersection	Control Type	Peak Hour	Pre-Construction		Construction Period		
			Delay[1]	LOS	Delay	LOS	Δ[2]
Chesterfield Drive/Coast Highway 101	Signal	AM	20.3	C	20.2	C	0.0
		PM	27.4	C	27.4	C	0.0
Chesterfield Drive/San Elijo Avenue	Signal	AM	23.3	C	23.5	C	0.2
		PM	21.7	C	21.8	C	0.1
Manchester Avenue/I-5 Southbound Ramps	All Way Stop Controlled	AM	17.5	C	17.5	C	0.0
		PM	12.4	B	12.6	B	0.2
Manchester Avenue/I-5 Northbound Ramps	Signal	AM	18.5	B	18.7	B	0.2
		PM	23.6	C	24.0	C	0.4
Lomas Santa Fe Drive/Coast Highway 101	Signal	AM	29.8	C	31.9	C	2.1
		PM	34.6	C	37.3	C	2.3
Lomas Santa Fe Drive/Rios Avenue[3]	Signal	AM	10.8	B	10.8	B	0.0
		PM	11.9	B	11.9	B	0.0
Lomas Santa Fe Drive/I-5 Southbound Ramps	Signal	AM	20.2	C	20.5	C	0.5
		PM	19.8	B	20.2	C	0.4
Lomas Santa Fe Drive/I-5 Northbound Ramps	Signal	AM	49.2	D	49.8	D	0.6
		PM	29.2	C	29.6	C	0.4

[1] Average delay expressed in seconds per vehicle.
[2] Δ=Change in delay due to construction traffic.
[3] Although vegetation removal traffic was assigned to the Lomas Santa Fe/Rios Avenue intersection due to the location of a project access/staging area at the terminus of this residential street, 0 trips would be expected to occur during the AM/PM peak hours.

Bridge Construction

The road along Coast Highway 101 across the mouth of the lagoon would be demolished and replaced with the proposed bridge in two parts. Two-way traffic would be maintained throughout the 18-month construction period.

Traffic volume on Coast Highway 101 near the bridge includes both discretionary trips and necessary trips. “Discretionary” trips are those made on Coast Highway 101 out of convenience or pleasure. “Necessary” trips along Coast Highway 101 would consist of local residential or business trips between coastal cities that would use the road as the fastest route between destinations. With respect to bridge construction, it is assumed that necessary trips would remain on Coast Highway 101, despite the diminished capacity through the construction zone, while discretionary trips would either avoid Coast Highway 101 altogether, or would divert to I-5 before the construction zone. The final lateral roadways to divert to would be (from the south) Lomas Santa Fe Drive, or (from the north) Manchester Avenue via Chesterfield Drive.

During the construction period, the volume on the subject segment of Coast Highway 101 is 20,310 ADT, with a four-lane roadway capacity of 35,200 ADT. When the bridge construction

occurs, roadway capacity would be reduced by two lanes (50 percent), to 17,600 ADT. Assuming that all 20,310 ADT wish to be on this segment, the latent, unserved demand of the reduced-capacity roadway is thus 2,710 ADT (20,310 ADT demand – 17,600 ADT served = 2,710 ADT unserved). These would be characterized as discretionary trips, which would utilize I-5 as an alternate route. Assuming this unserved Coast Highway 101 volume (1,355 northbound and 1,355 southbound) waited until the last opportunity to exit Coast Highway 101 to divert to I-5, it would utilize Lomas Santa Fe Drive and Chesterfield Drive, respectively.

Table 3.10-7 shows the daily segment operations on the affected roadways in the study area with the 2,710 ADT diverted. This table shows that segments affected by the bridge lane closure would continue to operate at acceptable LOS C or better with the following exceptions:

- Coast Highway 101 – South of Chesterfield Drive, LOS E
- Lomas Santa Fe Drive – Solana Hills Drive to I-5, LOS F

The degradation of these two roadway segments would exceed the allowable thresholds during bridge construction activities and would be considered a **temporary direct significant and substantially adverse impact (Criterion A).**

Summer/Special Event Season

Construction is expected to begin in January 2016 and be completed by spring 2019 and would overlap with two summer seasons when special events such as the San Diego County Fair and the Del Mar Races are held. Phases 1, 2, and 4 of Alternative 2A and Alternative 1B, and Alternative 1A include activities that would overlap with a summer season. For Alternative 2A, the first two phases also include the first 10 months of bridge construction, including the partial closure of the Coast Highway 101 bridge, which would coincide with the summer 2018 fair and race season.

The Traffic Analysis Report (Appendix J) analyzed historical ADT count data to determine how lane closures on the bridge would affect summer-season weekday traffic volumes; the analysis in this document was conducted using weekday October 2012 traffic. A comparison of three summer scenarios—off-season typical summer traffic, summer fair traffic, and summer race traffic—and the October counts was conducted. The comparison showed that the average increase in weekday traffic during the summer months (off-season, and fair and race season) is generally 26 percent. The majority of this traffic increase occurs along Coast Highway 101 as beachgoers, visitors, and fairgrounds patrons travel this scenic route. It can therefore be anticipated that, during the peak summer/special event season while bridge construction is

Table 3.10-7
Bridge Replacement Street Segment Operations

Street Segment	Construction Period without Bridge Lane Closures				Construction Period with Bridge Lane Closure					
	Capacity (LOS E)[1]	ADT	LOS	V/C	Capacity (LOS E)[1]	Diverted Trips	ADT	LOS	V/C	Δ[2]
Coast Highway 101										
North of Chesterfield Drive	35,200	16,700	A	0.474	35,200	-	16,700	A	0.474	0.000
South of Chesterfield Drive	35,200	20,310	A	0.577	**17,600**	**(2,710)**	**17,600**	**E**	**1.000**	**0.423**
North of Lomas Santa Fe Drive	30,000	18,396	C	0.613	30,000	-	18,396	C	0.613	0.000
Chesterfield Drive										
East of Coast Highway 101	32,400	17,990	A	0.555	32,400	1,355	19,345	A	0.597	0.042
San Elijo Avenue										
South of Chesterfield Drive	20,000	710	A	0.036	20,000	1,355	2,065	A	0.103	0.068
Manchester Avenue										
West of I-5 Southbound Ramps	20,000	7,146	A	0.357	20,000	1,355	8,501	A	0.425	0.068
East of I-5 Northbound Ramps	32,400	28,264	D	0.872	32,400	,	28,264	D	0.872	0.000
Rios Avenue										
North of Lomas Santa Fe Drive	8,000	2,086	A	0.261	8,000	,	2,086	A	0.261	0.000
Lomas Santa Fe Drive										
East of Coast Highway 101	40,000	20,312	B	0.261	40,000	1,355	21,667	C	0.542	0.034
Hilmen Drive to Stevens Avenue	40,000	23,772	C	0.594	40,000	1,355	25,127	C	0.628	0.034
Solana Hills Drive to I-5	40,000	38,892	E	0.508	**40,000**	**1,355**	**40,247**	**F**	**1.006**	**0.034**

[1] Capacities based on City of Encinitas and City of Solana Beach roadway classification tables.
[2] Δ=Change in delay due to construction traffic.

Notes:
The two-lane capacity of Coast Highway 101 is half of the four-lane capacity (35,200 ADT ÷ 2 = 17,600 ADT)
The demand on Coast Highway 101 exceeds the reduced capacity by 2,710 ADT.
The excess demand (2,710 ADT) is expected to divert to Chesterfield Drive/Manchester Avenue and Lomas Santa Fe Drive.
The total diverted trips are divided by 2: northbound = 1,355 ADT to Lomas Santa Fe Drive; southbound = 1,355 ADT to Chesterfield Drive/Manchester Avenue

operating, an increase in traffic volumes of 26 percent could be expected within the study area in addition to the rerouting of "necessary" trips discussed above.

As shown in the Traffic Analysis Report (Appendix J), two roadway segments would be expected to continue to operate at LOS F during the summer and special event seasons during both the pre-construction and construction periods. These segments are Manchester Avenue (segment east of the I-5 NB ramps), and Lomas Santa Fe Drive (segment from Solana Hills Drive to I-5). **Since the increase in V/C on these two segments with the addition of project traffic does not exceed allowable thresholds, no significant or substantially adverse project impacts would be expected during the summer/special event season (Criterion A).**

However, the segments listed below would be negatively affected by the partial closure of the bridge during summer/special event season. These bridge lane closure impacts are at the same locations identified previously for degradation during bridge construction activities. Thus, the bridge lane closures would result in these previously identified impacts regardless of the season or time of year, but would not result in additional significant impacts during the summer/special event season.

- Coast Highway 101 – South of Chesterfield Drive, LOS E
- Lomas Santa Fe Drive – Solana Hills Drive to I-5, LOS F

Other Traffic and Circulation Considerations

Implementation of Alternative 2A would not result in a substantial increase in hazards due to a design feature or incompatible uses. Bridge construction would result in a new and safely designed structure that would serve traffic in a manner similar to the existing roadway. The construction or operation of the project would not create new or incompatible transportation uses on the local circulation system.

As described in the street segment and intersection impact discussions above, construction of Alternative 2A would not generate traffic volumes that could cause poor traffic operating conditions in the study area. Reconstruction of the Coast Highway 101 bridge would result in reduced capacity during the construction period; this could result in inadequate emergency access along these roadway segments. However, a traffic management plan would be required by the cities of Encinitas and Solana Beach that would detail how traffic flow would be maintained in each direction at all times and would also outline safety and emergency procedures to ensure that adequate emergency access is available at all times through the impacted areas. Measures in the traffic control plan may include informing and coordinating with emergency services provided in the area, use of flagmen to control traffic flow and allow passage for emergency

vehicles, etc. **Thus, temporary direct impacts to emergency access during construction activities related to the bridge reconstruction would be less than significant and are not considered substantially adverse (Criterion C).**

As described in the Existing Circulation System discussion above, various public transit, bicycle, and pedestrian facilities are incorporated into the circulation system throughout the study area. Additional temporary ADT added to the roadways during construction of the project would not obstruct or conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Temporarily reduced roadway capacity during bridge reconstruction would affect public transit using that roadway in the same manner as it would traffic using the impacted roadway, including reduced speeds and potential delays. However, this temporary reduction of roadway capacity would be eliminated once the new bridge is complete, and traffic would return to normal operating conditions. This is not considered a significant conflict with policies or a decrease in the performance or safety of public transit opportunities. Pedestrian and bike access would be maintained across the roadway and bridge during construction. The new bridge structure would incorporate a Class 2 bike lane and separated pedestrian path to allow continued access along Coast Highway 101. **No significant or substantial adverse impacts would occur (Criterion D).**

Inlet maintenance would be required under all alternatives. Under Alternative 2A, maintenance dredging would take approximately 5 months (occurring every 3–4 years) and would be accomplished via a pipeline discharging directly to the beach placement site. This would require equipment delivery and limited worker trips for the dredge (which requires few workers). For Alternative 1B and Alternative 1A, annual inlet maintenance would take approximately 4 and 2 weeks, respectively. Trucks would haul dredged material on an access route between Coast Highway 101 and the railroad ROW, under the Coast Highway 101 bridge to the beach site. These haul trips would not utilize public roadways, and traffic generated from maintenance dredging would be limited worker trips for the dredge.

As noted in the discussion of the traffic analysis, potential transportation impacts would only result during construction activities as there would be no substantial generation of vehicle trips once restoration activities and bridge reconstruction are complete. Thus, the project **would not result in substantial adverse or direct or indirect long-term significant impacts to access routes, local streets, or parking areas in the vicinity of the project area (Criterion E).**

Alternative 1B

Construction traffic operations associated with Alternative 1B are anticipated to be similar to those described under Alternative 2A. Specific trip generation numbers for each alternative may vary but would not be in excess of those analyzed for Alternative 2A. Therefore, the discussions of street segment operations and intersection operations above would also be applicable to this alternative.

Alternative 1B would require the existing Coast Highway 101 bridge to be retrofitted to address existing seismic deficiencies. No roadway features would be constructed with this alternative, **and there would be no substantially increased hazards or incompatible uses along Coast Highway 101. No significant or substantial adverse impact would occur (Criterion B).**

Similar to the measures discussed above, a traffic control plan would be required by the cities of Encinitas and Solana Beach to maintain emergency access and pedestrian/bike access during retrofit activities. **Alternative 1B would not result in significant direct or indirect significant impacts to emergency access, transit, bicycle, or pedestrian facilities, or access routes, local streets, or parking areas in the vicinity of the project area (Criteria C, D, and E). No substantial adverse impacts would occur.**

Similar to Alternative 2A, the existing bridge would remain in service throughout the retrofitting activities, with two-way traffic flow maintained at all times with one side of the bridge closed and traffic rerouted to the other side while work was completed. While the duration and timing of the retrofitting would be shorter than complete bridge construction, the necessary lane closures are similar and thus would result in similar traffic impacts and trip redistribution as analyzed for Alternative 2A, although impacts would not last as long. Thus, as detailed under Alternative 2A, segments affected by the bridge lane closures would continue to operate at acceptable LOS C or better with the following exceptions:

- Coast Highway 101 – South of Chesterfield Drive, LOS E
- Lomas Santa Fe Drive – Solana Hills Drive to I-5, LOS F

The degradation of these two roadway segments would exceed the allowable thresholds during bridge retrofitting activities and would be considered a **temporary direct significant and substantial adverse impact with implementation of Alternative 1B (Criterion A).**

Alternative 1A

Construction traffic operations associated with Alternative 1A are anticipated to be similar to those described under Alternative 2A, because specific trip generation numbers for each alternative may vary but would not be in excess of those analyzed for Alternative 2A. Therefore, the discussions of street segment operations and intersection operations above would also be applicable to this alternative.

Alternative 1A would require the existing Coast Highway 101 bridge to be retrofitted to address existing seismic deficiencies. No roadway features would be constructed with this alternative, **and there would be no substantially increased hazards or incompatible uses along Coast Highway 101. No significant or substantial adverse impact would occur (Criterion B).**

Similar to the measures discussed above, a traffic control plan would be required by the cities of Encinitas and Solana Beach to maintain emergency access and pedestrian/bike access during retrofit activities. **Alternative 1A would not result in significant direct or indirect significant impacts to emergency access, transit, bicycle, or pedestrian facilities, or access routes, local streets, or parking areas in the vicinity of the project area (Criteria C, D, and E). No substantial adverse impacts would occur.**

Similar to Alternative 2A, the existing bridge would remain in service throughout the retrofitting activities, with two-way traffic flow maintained at all times with one side of the bridge closed and traffic rerouted to the other side while work was completed. While the duration of the retrofitting would be shorter than complete bridge construction, the necessary lane closures are similar and thus would result in similar traffic impacts and trip redistribution as analyzed for Alternative 2A, although impacts would not last as long. Thus, as detailed under Alternative 2A, segments affected by the bridge lane closures would continue to operate at acceptable LOS C or better with the following exceptions:

- Coast Highway 101 – South of Chesterfield Drive, LOS E
- Lomas Santa Fe Drive – Solana Hills Drive to I-5, LOS F

The degradation of these two roadway segments would exceed the allowable thresholds during bridge retrofitting activities and would be considered a **temporary direct significant and substantial adverse impact with implementation of Alternative 1A (Criterion A).**

No Project/No Federal Action Alternative

The No Project/No Federal Action Alternative would not result in the addition of construction-related vehicle trips or the modification of local roadways. **There would be no significant or substantial adverse direct or indirect impact to traffic or circulation (Criteria A through E).**

Materials Disposal/Reuse

As noted in Section 3.10.1, offshore and nearshore disposal/reuse materials placement would be accomplished via ocean barge and pipeline and no land-based traffic would result; thus, offshore and nearshore scenarios are not discussed further. Since material from Alternative 1A would be disposed via pipeline and barge to LA-5 or reused within the proposed project footprint, this component is not discussed further. The traffic impact analysis for the onshore materials placement sites addresses the potential for the various alternatives to impact existing vehicular traffic and parking conditions in the vicinity of the placement sites. Information is largely incorporated from the 2012 RBSP EA/EIR.

Alternative 2A–Proposed Project and Alternative 1B: Onshore Placement

Implementation of onshore materials placement for either of these alternatives would require delivery of construction equipment and commuting of work crews to onshore placement beaches. It is assumed that, at a maximum, a 12-person crew would be working at a placement site at a time. Construction personnel would park in public parking areas adjacent to the sites but would not create significant direct parking impacts given the small number of spaces required at each site and the short duration of placement at each site. Sand placement activities would not significantly affect traffic, as these activities would generate very few trips and would not be located on public roadways or transit facilities. Pedestrian and bike access, as well as emergency access, would be maintained throughout construction. The small increases in traffic volumes and project parking needs during material placement activities would be localized and temporary and are **not considered substantially adverse. Less than significant direct impacts to existing traffic and circulation patterns; emergency access; and public transit, bicycle, or pedestrian facilities would occur (Criteria A, C, and D).**

Subsequent to the completion of sand placement, some changes in traffic could occur. The material placement at sites where there is currently little sand could make these locations more attractive to both residents and tourists, and it is expected that traffic could increase accordingly. The use of parking would also increase. Some of the increase would come from new users, and some would come from users of adjacent, currently sandy, but less convenient beaches. In the

latter case, some decrease in traffic would occur at the adjacent beaches. Because sand placement would be limited to beaches and no changes to existing public facilities or roadways would occur, **hazards would not increase due to a project design feature or incompatible uses and no significant or substantial adverse impacts would occur (Criterion B).**

The most severe traffic and parking congestion would continue to occur on warm summer weekends and holidays, and the improvement of the specific beaches with sand placement may induce additional use that would marginally increase the congestion for the period during which additional placed sand remained on the beach. Traffic and parking congestion at beaches is an accepted occurrence, and it is not common practice to design infrastructure to accommodate these peak loads. Additionally, sand placed at individual sites is predicted to remain noticeable at each beach for an average of 5 years as the sand is distributed throughout the littoral cell. **The long-term indirect impact of the proposed material placement on traffic and parking is not considered substantially adverse and would be less than significant (Criterion E).**

3.10.4 AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

Bridge replacement construction activities associated with Alternative 2A and bridge retrofitting activities under Alternative 1B and Alternative 1A would result in a substantial adverse and significant traffic impact under both NEPA and CEQA, respectively. Project design features would be incorporated into the project to avoid or minimize other traffic impacts, including maintaining two-way traffic during construction and conforming to standards regarding sight distance and safe design speeds both during and after construction, as applicable. Mitigation measures Traffic-1 and Traffic-2 would be required to address significant and adverse impacts associated with lane closure along Coast Highway 101.

Lagoon Restoration

Traffic-1 Prepare work zone traffic control plans for lane closures and related construction along Coast Highway 101. The work zone traffic control plans shall be prepared in accordance with the California Manual of Uniform Traffic Control Devices (CAMUTCD), Caltrans Standard Plans (2010), and current standards and best practices of the reviewing and approving agencies. These plans are intended to accommodate workers within the roadway, while facilitating continued circulation for road users (motorists, bicyclists, and pedestrians including persons with disabilities in accordance with the ADA) through the work zone.

Traffic-2 Provide advanced notification to motorists that delays and traffic congestion will occur during bridge construction and retrofitting activities to encourage avoidance

of the construction area. This notification may be accomplished through various measures such as information and detour routes included on the project website; traffic details included in notifications sent to local residents; traffic and alternative route information published in local media; and physical traffic control measures, such as temporary signage located at various distances from the construction area.

Additional mitigation measures to reduce the traffic congestion on segments of Coast Highway 101 and Lomas Santa Fe were considered, but none were found feasible to mitigate the temporary traffic impacts due to bridge construction or retrofitting. Typically, to lessen congestion impacts due to high traffic volume on a lower-capacity roadway, a project could decrease the trips it would generate through scaling back the project (e.g., reducing unit count, decreasing square footage, etc.). However, the proposed project is not a high-volume trip-generating type of project and the significant impact is a result of temporarily diminished road capacity due to the bridge construction or retrofitting, not increased traffic volume; thus, typical measures to address V/C issues are not feasible. Other methods of increasing roadway to eliminate significant traffic impacts include widening the roadway. This would require the acquisition of ROW from both commercial and residential properties along the impacted roadway segments of Coast Highway 101 and Lomas Santa Fe. This would cause substantial disruptions to the local community, residents, and businesses; cause adverse effects to parking and access to the local beach and recreation areas; and would also be very expensive. Additionally, this permanent measure is not appropriate to correct a temporary short-term impact that would be resolved once the new bridge is operational or existing bridge retrofit work is complete. Thus, roadway widening is not a feasible solution for the temporary traffic impact. Temporary roadway modifications, such as restriping, use of roadway shoulders as lanes, or signal timing could be implemented to better handle increased traffic volume on the existing roadway. However, the impacted segments of Coast Highway 101 and Lomas Santa Fe are not appropriate locations for these types of modifications, mostly due to limited space available for modifications and the potential safety implications of such actions.

Based on the above discussion, there is no additional feasible mitigation to further reduce temporary direct impacts caused by the reduction in capacity associated with the demolition and construction of the bridge under Alternative 2A or bridge retrofitting under Alternative 1B or Alternative 1A to less than significant.

Materials Disposal/Reuse

Potential impacts would be less than significant for all alternatives and no mitigation measures are proposed.

3.10.5 LEVEL OF IMPACT AFTER MITIGATION

Lagoon Restoration

CEQA: By preparing a traffic control plan and notifying motorists of delays and suggesting earlier detour routes, as required in mitigation measures Traffic-1 and Traffic-2, some traffic volume in the construction area may be reduced as appropriate traffic control measures would be in place and people could choose to exit from Coast Highway 101 before reaching the immediate area where most traffic congestion would occur. It is not possible to predict the number of trips this measure would eliminate along the impacted roadway segments, but it is not anticipated to reduce the traffic volume to below a level of significance.

No additional feasible mitigation is available to reduce the traffic impacts resulting from temporarily reduced capacity due to the Coast Highway 101 bridge construction activities associated with Alternative 2A and bridge retrofitting activities associated with Alternative 1B and Alternative 1A. Impacts would remain significant and unavoidable.

Because full roadway capacity would resume after completion of the new bridge or completion of the existing bridge retrofit work, the temporary traffic impacts would be eliminated at that time and traffic operations would revert to their previously acceptable conditions.

NEPA: By preparing a traffic control plan and notifying motorists of delays and suggesting earlier detour routes, as required in mitigation measures Traffic-1 and Traffic-2, some traffic volume in the construction area may be reduced as appropriate traffic control measures would be in place and people could choose to exit from Coast Highway 101 before reaching the immediate area where most traffic congestion would occur. It is not possible to predict the number of trips this measure would eliminate along the impacted roadway segments, however, and substantial adverse impacts may still occur.

No additional feasible mitigation is available to reduce the traffic impacts resulting from temporarily reduced capacity due to the Coast Highway 101 bridge construction activities associated with Alternative 2A and bridge retrofitting activities associated with Alternative 1B and Alternative 1A.

Because full roadway capacity would resume after completion of the new bridge or completion of the existing bridge retrofit work, the temporary traffic impacts would be eliminated at that time and traffic operations would revert to their previously acceptable conditions.

Materials Disposal

CEQA: Potential impacts would be less than significant and no mitigation measures are proposed.

NEPA: No substantial adverse impacts would occur and no mitigation measures are proposed.